

101.1 Plain Carbon Steels (chip form)

These SRMs are for checking chemical methods of analysis. They consist of steel alloys selected to provide a wide range of analytical values for elements. They are furnished in 150-g units (unless otherwise noted) as chips usually sized between 0.4 mm to 1.2 mm, prepared from selected portions of commercial ingots.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

		Element Composition (mass fraction, in %)														
SRM	Description	C	Mn	P	S	Si	Cu	Ni	Cr	V	Mo	Co	Ti	Sn	Al (total)	N
8k	Bessemer Steel (Simulated), 0.1% Carbon	0.0806	0.504	0.0956	0.0775	0.0576	0.0200	0.1174	0.0467	0.0145	0.0397					
11h	Basic Open-Hearth Steel, 0.2% Carbon	0.200	0.510	0.010	0.026	0.211	0.061	0.028	0.025	0.001			0.004			
12h	Basic Open-Hearth Steel, 0.4% Carbon	0.407	0.842	0.018	0.027	0.235	0.073	0.032	0.074	0.003	0.006				(0.038)	0.006
13g	0.6% Carbon Steel	0.613	0.853	0.006	0.031	0.355	0.066	0.061	0.05	0.001					0.048	
14g	Carbon Steel (AISI 1078)	0.735	0.456	0.006	0.019	0.232	0.047	0.030	0.081	0.0008	0.011				0.025	
15h	Basic Open-Hearth Steel, 0.1% Carbon	0.076	0.373	0.005	0.019	0.008	0.013	0.017	0.018	<0.001	0.009				0.061	
16f	Basic Open-Hearth Steel, 1.1% Carbon	0.97	0.404	0.014	0.026	0.214	0.006	0.008	0.020	0.002	0.003	0.003				
19h	Basic Electric Steel, 0.2% Carbon	0.215	0.393	0.016	0.022	0.211	0.466	0.248	0.0173	0.003	0.038				0.002	
20g	AISI 1045 Steel	0.462	0.665	0.012	0.028	0.305	0.034	0.034	0.036	0.002	0.008				0.040	
152a	Basic Open-Hearth Steel, 0.5% Carbon (Tin bearing)	0.486	0.717	0.012	0.030	0.202	0.023	0.056	0.046	0.001	0.036			0.032		
	178 0.4C Basic Oxygen Furnace Steel	0.395	0.824	0.012	0.014	0.163	0.032	0.010	0.016	0.001	0.003					
337a	Basic Open-Hearth Steel, 1% Carbon (Carbon & Sulfur) (300 a)	0.969			0.024											
	368 Steel (AISI 1211)	0.089	0.82	0.084	0.132	0.007	0.010	0.008	0.030	0.001	0.003					0.010

Values in parentheses are not certified and are given for information only.